REMARKS

Herein, the "Action" or "Office Action" refers to the Office Action dated 10/14/2004.

Applicant respectfully requests reconsideration and allowance of all of the claims of the application. Claims 1-7, 15-19, 64, 65, and 67-71 are presently pending. Claims amended herein are 1, 7, 15, 64, and 65. Claims withdrawn or cancelled herein are none. New claims added herein are 67-71.

Formal Objections

Under 37 CFR 1.75, the Office objects to claims 64 and 65 as being a duplicate of claims 7 and 15, respectively.

Regarding claims 7 and 64, Applicant agrees and amends claim 7 so that depends from claim 3. As amended, claim 7 now incorporates elements and features of claim 3, which are not found in claim 64. Therefore, claim 7 and 64 are no longer duplicates of each other.

Regarding claims 15 and 65, Applicant disagrees. The subject matter of claim 15 is a method and the subject matter of claim 65 is a computer-readable medium. Therefore, these claims are not duplicates of each other.

Applicant suspect that the Office may have meant claim 19 rather than claim 15. If so, Applicant submits that claims 19 and 65 are not duplicates. Claim 19 depends from claim 16 (and not claim 15). Unamended, claim 19 incorporates elements and features of claim 16, which are not found in claim 65. Therefore, claim 19 (or claim 15) and 65 are not duplicates of each other.

Substantive Claim Rejections

Claim Rejections under §102

The Office rejects all of the pending claims under §102. For the reasons set forth below, the Office has not shown that cited reference anticipates (under §102) the rejected claims. Accordingly, Applicant respectfully requests that the rejections be withdrawn and the case be passed along to issuance.

The Office's rejections are based upon the following reference Li: *Liang Li*, US Patent No. 5,774,588 (issued 6/30/1998).

Overview of the Application

The Application describes a technology for recognizing the content of text documents. The technology may detect similarity between text-based works in an automatic and accurate manner. Furthermore, it may categorize content of text-based works in an automatic and accurate manner.

Generally, the technology determines one or more hash values for the content of a text document. Furthermore, the technology may generate a "sifted text" version of a document.

In one implementation described herein, document recognition is used to determine whether the content of one document is copied (i.e., plagiarized) from another document. This is done by comparing hash values of documents (or alternatively their sifted text).

In another implementation described herein, document recognition is used to categorize the content of a document so that it may be grouped with other documents in the same category.

Cited Reference

The Office cites **Li** as its primary reference in its anticipation-based rejections.

The Li reference is owned to the United Parcel Service, Inc. (UPS) and is apparently utilized in electronically reading (e.g., via optical character recognition) addresses on packages. Li describes a technology for efficiently comparing an unverified string to a "lexicon," which filters the lexicon through multiple steps to reduce the number of entries to be directly compared with the unverified string.

The Li method begins by preparing the lexicon with an n-gram encoding, partitioning and hashing process, which can be accomplished in advance of any processing of unverified strings. The unknown is compared first by partitioning and hashing it in the same way to reduce the lexicon in a computationally inexpensive manner. This is followed by an encoded vector comparison step, and finally by a direct string comparison step, which is the most computationally expensive.

The reduction of the lexicon is accomplished without arbitrarily eliminating any large portions of the lexicon that might contain relevant candidates. At the same time, the method avoids the need to compare the unverified string directly or indirectly with all the entries in the lexicon. The final candidate list includes only highly possible and ranked candidates for the unverified string, and the size of the final list is adjustable.

Anticipation Rejections Based upon Li

The Office rejects claims 1-7, 15-19, 64, and 65 under USC § 102(b) as being anticipated by Li. Applicant respectfully traverses the rejections of these claims. Based on the reasons given below, Applicant asks the Office to withdraw its rejection of these claims.

Claims 1 and 64

With the cited portions of Li provided in brackets, these amended claims recite (in part):

- obtaining a body of text containing textual content in a computer-readable format; **[Fig. 1A, step 100; Fig. 1B, step 120; Col. 6, lines 40-50]**
- formatting the body of text into a defined image-based format, wherein the textual content of the defined image-based formatted body of text is immutable via software tools for manipulation of textual content of bodies of text;
- deriving a hash value representative of the textual content of the body of text, perceptually distinct bodies of text having hash values that are substantially independent of each other. **[Figs. 2, 4A-B, and 5; col. 7, lines 17-67, col. 8, lines 1-14]**;

By amendment herein, Applicant adds the "formatting" element. Support for this amendment is found, for example, at the following locations in the Application:

- Page 12, line 22 through page 13, line 8
- Page 18, lines 5-7

421 West Riverside, Suite 500
Spokane, WA 99201
P: 509.324.9256
F: 509.323-8979
www.leehayes.com

The "image" format described in the Application is the "defined image-based format" terminology used here in this claim. The "textual content of the defined image-based formatted body of text is immutable via software tools for manipulation of textual content of bodies of text" terminology used in this claim refers to visible characters in a digital image and their unalterable nature at a character-addressable level. In other words, the apparent textual content of a body of text in defined image-based format—in particular, the characters and words—cannot be simply modified using "software tools for manipulation of textual content of bodies of text." Examples of such tools include text editors and word processors.

Applicant submits that **Li** does not disclose: "formatting the body of text into a defined image-based format, wherein the textual content of the defined image-based formatted body of text is immutable via software tools for manipulation of textual content of bodies of text."

As shown above, **Li** does not disclose all of the claimed elements and features of these claims. Accordingly, Applicant asks the Office to withdraw its rejection of these claims.

Claims 2-7 and 67-69

These claims ultimately depend upon independent claim 1. As discussed above, claim 1 is allowable.

In addition to its own merits, each of these dependent claims is allowable for the same reasons that its base claim is allowable. Applicant submits that the

421 West Riverside, Suite 500
Spokane, WA 99201
P: 509.324-9256
F: 509.323-8979
www.leehayes.com

Office withdraw the rejection of each of these dependent claims because its base claim is allowable.

Claims 15 and 65

With the cited portions of Li provided in brackets, these amended claims recite (in part):

- obtaining a body of text containing textual content in a computer-readable format; [Fig. 1A, step 100; Fig. 1B, step 120; Col. 6, lines 40-50]

- formatting the body of text into a defined image-based format, wherein the textual content of the defined image-based formatted body of text is immutable via software tools for manipulation of textual content of bodies of text;

- deriving a hash value representative of the body of text, perceptually similar bodies of text having proximally similar hash values. [Figs. 4A-B; col. 7, lines 50-67, col. 8, lines 1-14];

By amendment herein, Applicant adds the "formatting" element. Support for this amendment is found, for example, at the following locations in the Application:

- Page 12, line 22 through page 13, line 8

- Page 18, lines 5-7

The "image" format described in the Application is the "defined image-based format" terminology used here in this claim. The "textual content of the defined image-based formatted body of text is immutable via software tools for

Serial No.: 09/843,255
Atty Docket No.: MSI-647us
RESPONSE TO OFFICE ACTION DATED 10/14/2004

15

1228041357 G:\MSI-0\647us\MSI-647us.m02.doc
atty: Kenny C. Christie

PAGE 17/19 * RCVD AT 12/30/2004 2:43:39 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/4 * DNIS:8729306 * CSID:509 323 8979 * DURATION (mm-ss):05-08

manipulation of textual content of bodies of text" terminology used in this claim refers to visible characters in a digital image and their unalterable nature at a character-addressable level. In other words, the apparent textual content of a body of text in defined image-based format—in particular, the characters and words—cannot be simply modified using "software tools for manipulation of textual content of bodies of text." Examples of such tools include text editors and word processors.

Applicant submits that Li does not disclose: "formatting the body of text into a defined image-based format, wherein the textual content of the defined image-based formatted body of text is immutable via software tools for manipulation of textual content of bodies of text."

As shown above, Li does not disclose all of the claimed elements and features of these claims. Accordingly, Applicant asks the Office to withdraw its rejection of these claims.

Claims 16-19, 70, and 71

These claims ultimately depend upon independent claim 15. As discussed above, claim 15 is allowable.

In addition to its own merits, each of these dependent claims is allowable for the same reasons that its base claim is allowable. Applicant submits that the Office withdraw the rejection of each of these dependent claims because its base claim is allowable.

Serial No.: 09/843,255
Atty Docket No.: MS1-647us
RESPONSE TO OFFICE ACTION DATED 10/14/2004

16

1228041357 G:\MS1-0\647us\MS1-647us.m02.doc
atty: Kasey C. Christie

PAGE 18/19 * RCVD AT 12/30/2004 2:43:39 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/4 * DNIS:8729306 * CSID:509 323 8979 * DURATION (mm-ss):05-08

Dependent Claims

In addition to its own merits, each dependent claim is allowable for the same reasons that its base claim is allowable. Applicant submits that the Office withdraw the rejection of each dependent claim where its base claim is allowable.

Conclusion

All pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the Office is urged to contact the undersigned attorney before issuing a subsequent Action.

Respectfully Submitted,

Dated: _12-30-04_

By: _____

Kasey C. Christie
Reg. No. 40559
(509) 324-9256 x232
kasey@leehayes.com
www.leehayes.com

Serial No.: 09/843,255
Atty Docket No.: MSI-647us
RESPONSE TO OFFICE ACTION DATED 10/14/2004

17

1228041357 G:\MSI-0\547us\MSI-647us.m02.doc
atty: Kasey C. Christie